

MEMO

TO: Governor Schwarzenegger
Secretary Chrisman, Chair, Delta Vision Committee

FROM: Phil Isenberg, Chair, Delta Vision Blue Ribbon Task Force

DATE: xxxxxxxx

RE: Recommendations for Near Term Actions to Support the Vision for California's Delta

In response to Executive Order S-17-06, the Delta Vision Blue Ribbon Task Force produced a 'durable vision for sustainable management of the Delta'. That vision looks forward at least three generations, and identifies policies needed to achieve the recommended vision. Steps required to achieve the recommended vision will be further developed in the strategic plan phase of Delta Vision, to be completed by November 2008.

Some of the threats to the Delta and Suisun Marsh are so serious that specific recommendations for short and mid-term action are warranted. Something needs to be done – and done in the very near term – but within the context of the vision.

Recent efforts by the Governor and the Legislature to keep people and development out of flood prone areas and to seek a higher level of flood protection in the Delta and related areas have been impressive. Voter approval of bonds for flood management has been another illustration that Californians are coming to terms with their water and environmental problems. However, much more remains to be done to improve public safety and the integrity of water delivery systems and infrastructure.

Proposals to improve the functioning of the Delta ecosystem and the current water conveyance system also warrant immediate attention. Lists of "no or low-regrets" proposals for actions in the Delta have been advanced over the past months. Upon examination, it becomes apparent that most of these proposed actions do have risks, many would impact some interests or values negatively and virtually all will require months to years for design and permitting before implementation.

Any proposed near term action should be evaluated as follows:

1. Every action should flow directly from key goals, principles, and outcomes contained in the Vision.
2. Each should be capable of quick initiation even if implementation may take a long time.

3. Near term actions may:

- Through policy and regulation, seek to insure that opportunities to serve long-term needs are not vitiated by short-term decisions, resource allocations, or projects undertaken without benefit of a long-range, comprehensive perspective.
- Provide an early start for actions that have long lead times.
- Encourage the first phases of larger projects to get funding, design, permitting and contracting underway, and to provide proof of concept before full-scale implementation.
- Be designed and monitored to provide the knowledge needed to inform later larger-scale investments and alterations.
- Recognize and reduce current risks to life and property.
- Protect the State's interests and exposure to liability.

4. Near-term actions need not be characterized as easy, as low-hanging fruit, or as having no regrets. Some may in fact be highly difficult or contentious, yet be essential because of a strong need and rationale.

5. Near term actions should first attempt to build upon existing organizations and authorities, but not be bound by their shortcomings.

In each of the four areas below, actions have been identified which can be launched in the near term and which appear to meet the criteria above. These actions should be initiated quickly, recognizing that the required analyses and permitting will require months to a few years for some recommendations.

1. Public Safety and Disaster Preparedness

Human life and safety are top priorities for California state government. That is why protecting and enhancing the ecosystem and water supply in California's Delta is so important. Other aspects to public safety include preparing for and responding to disasters. Threats to human life and safety include flooding, earthquakes, and other catastrophic events like a toxic spill. The levee system in California's Delta is a critical concern in terms of a catastrophe and how state and local governments can respond.

Flooding is the most common and damaging natural disaster in California. More than 90 percent of the Delta's land area is within Federal Emergency Management Agency (FEMA) flood zones. The principal catastrophic event facing California's Delta is flooding from levee failure, earthquake or intense storms. Several initiatives looking at the potential statewide economic impact from a Delta catastrophic flooding event recommend strengthening the Delta's emergency response program. Although images of New Orleans flooding are in people's minds, a major flood in California's Delta will be very different: the flood waters will be deeper and colder than what happened in Louisiana. As a consequence, they are likely to be more lethal.

Potential actions regarding public safety and emergency response preparedness fall into three broad categories: actions to reduce risks, planning and capacity building, and public education and disaster preparation.

Actions to Reduce Risks

- **The Task Force recommends that the state begin acquiring title or easements to floodplains, establish bypasses where feasible, and disallow residential building in flood prone areas.** This cannot wait. Land that could provide flood protection at a reasonable cost is being threatened by urban development as this report is being written. Since flood protection comes first from minimizing high waters, it is obvious that the acquisition of identified floodplains must start now, and be pursued aggressively.
- **The state government should immediately conduct an emergency Delta disaster planning exercise, involving all appropriate federal, state and local agencies.** California cannot wait for a flood before planning our response; that must commence immediately. Although such an exercise may cost a significant sum of money, it is money well spent.
- **The state government should create a policy for levee improvements to protect heavily populated areas and key parts of water delivery and other infrastructure.**

Planning and Capacity Building

- **The state government should begin planning and coordination of emergency response training and preparedness planning,** similar to the good work begun by the Delta Protection Commission and the Delta counties. The statewide planning ought to establish clearly defined responsibilities and reporting relationships between local, regional, state, and federal authorities.
- **The Task Force also recommends a series of important actions that can begin within a few months:**
 - (1) Clarify chains of command for responses to emergencies;
 - (2) Establish clear benchmarks for recommending and demanding evacuations,
 - (3) Develop good regional evacuation plans, including evacuation routes and shelter locations;
 - (4) Begin emergency response exercises and drills with citizens as well as emergency response personnel;
 - (5) Stockpile and pre-position supplies, including caches for citizen emergency response;

- (6) Earmark money and give spending authority for rapid response;
- (7) Sign contracts for barges along the West Coast to move people and supplies. In a major event, California will likely need help from other states and any existing mutual aid agreements should be assessed and improved as needed; and
- (8) Ensure that adequate human labor resources to repair breaches will be available, and sufficiently mobile in the Delta, after any potential disaster.

- **The state government should also fund two focused programs of levee research.**

- (1) Accelerate assessment of the existing condition of the Delta levees, starting with levees protecting urban areas first, then those levees protecting critical public infrastructure such as water conveyance and transportation. Levee composition, underlying soils, hydraulic forces and other key conditions of levee integrity can vary almost on a yard-by-yard basis in the Delta. Existing information on these conditions is unacceptably poor and must be improved.
- (2) Research and develop more affordable and efficient seismic protection designs. Previous engineering experience with seismic retrofitting of dams suggests that such research could cut the cost of seismically secure levees by at least one-third.

It should be noted that even with sufficient barge and tug capacity to deliver the full production of the Dutra San Rafael quarry (the only one with direct marine access to the Delta) to rock placement in Delta levee breaches, the repair period for multiple levee failures is projected to be a minimum of 28 months for a 50-breach scenario, and 16 months for a 30-breach scenario.

Public Education and Preparation

- **The Task Force recommends that, as a matter of public policy, all Californians should be able to care for themselves and immediate family members for the first 72 hours after any disaster.** For flood risks in the Delta, this preparation includes a number of tangible actions, such as:

- (1) Setting up a Boat Search and Rescue Marshal Program for rapid evacuation of neighborhoods;
- (2) Changing building codes to require exits to a building's roof from the inside;
- (3) Painting lampposts on every block behind levees to show the 100-year flood or sea level, to address human tendencies to underestimate risks and avoid disaster preparation; and
- (4) Beginning school programs about emergency training.

2. Protecting the Delta from encroaching development

It is impossible to protect or improve the Delta ecosystem, or guarantee a stable water export system (whether through or around the Delta), if urban encroachment continues.

- Accordingly, **the Governor should immediately issue an Executive Order that addresses new raw land development in the Delta by developing standards consistent with Delta Vision within two years.** That Executive Order should apply to all lands within the contour of five feet above current sea level or some other geographically measured boundary which protects against negative effects of encroachment and projected sea level rise through 2100.
- **The order should call upon state agencies, the legislature and local governments to use their authorities to take appropriate action to prevent further encroachment on areas affected by sea level rise and river flooding.** These steps should remain in place for two years or until the Legislature adopts a clear plan to adjust the boundaries of the current statutory Delta, extend protection for vital ecosystem, flood control and other resource areas in the Delta secondary zone, and grant increased land use authority to appropriate state or regional agencies to ensure protection of the Delta.

3. Accelerating ecosystem revitalization

- **The responsible agencies and departments should be directed by the Governor to pursue high-priority ecosystem revitalization projects aggressively.** All policy efforts focused on the Delta identify several high priority ecosystem projects and there is a relatively high level of agreement on those projects. In some cases, the projects proposed to improve Delta ecosystem function differ from current proposals developed from other perspectives by local governments or state and federal government. Those differences should be resolved quickly. Given the statewide importance of success in improving functioning of the Delta ecosystem, the presumption should be established that conflicting policies and proposals developed to satisfy other policies should be changed as necessary. The ecosystem design team created under Delta Vision is analyzing proposed projects and will produce a list of recommended ecosystem restoration projects by early 2008.
- **The selected projects should receive highest priority in allocation of funds, including bond funds.** The Legislature should provide oversight on the progress of these projects.

- **As the new governance entity recommended by Delta Vision is created for the Delta, it should be charged with implementation of these projects and allocate or oversee all related funding.**

4. Improving current water conveyance systems

- **The responsible agencies and departments should be directed by the Governor to pursue improvements in the current conveyance systems as rapidly as possible.** As with ecosystem revitalization, policy efforts focused on the Delta identify several high priority improvements to the current water conveyance systems on which there are expected multiple benefits and high expectations for success.
- **The selected projects should receive highest priority in allocation of funds, including bond funds.** The Legislature should provide oversight on the progress of these projects.
- **As the new governance entity recommended by Delta Vision is created for the Delta, it should be charged with implementation of these projects and allocate or oversee all related funding.**